

I. HYPERNEPHROMA OF KIDNEY. II. FIBRO-ADE- NOMA OF INNER WALL OF ILEUM.

A CLINICAL REPORT.

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CASE I.—Hypernephroma of Kidney; Nephrectomy; Recovery; Death Fourteen Months Later, thought to be Due to Cerebral Embolism; No Clinical Evidence of Recurrence Prior to Death; Autopsy refused.

A woman aged fifty-two years, in robust health until six months prior to May, 1903. Family history has no bearing on the case. Duration of symptoms, six months. The first noticed were bladder irritability and increased frequency of urination, soon followed by a sense of weight and dragging beneath the right lobe of the liver. Gastric disturbances soon becoming marked, loss of appetite, occasional nausea, and gastralgia gradually supervened, and associated with them were progressive pallor and loss of weight, the latter twenty-five pounds in the course of the six months.

Four months previous to being seen by the writer, she had for the first time an attack of hæmaturia associated with sharp lumbar (renal?) pain radiating to the bladder. The pain and the blood in the urine continued in this attack for twenty-four hours. For the following six weeks there was more or less dull pain in the region of the right kidney and radiating downward to the bladder.

She first entered the Boston City Hospital in April, 1903, in the service of my colleague, Dr. George G. Sears, through whose courtesy I have been furnished with the results of the physical examination made at that time, of which the following are the more important features:

Physical Examination, April 15, 1903.—Skin shows similar discoloration to that seen in Addison's disease. Examination of all organs other than the following was negative.

Heart.—Systolic murmur at apex propagated to axilla was the only abnormal thing found.

Abdomen.—A large tumor is present in the right upper, lateral, and anterior aspects of the abdomen. It appeared to be identified with a kidney. It extended from the lower border of the last rib behind and above, downward and forward to a point midway between the umbilicus and the crest of the ilium, and in front nearly to the mammary line.

Urine.—Pale, acid; specific gravity, 1016. A considerable sediment, consisting of pus, renal and bladder epithelium. There was a slight trace of albumen in the intervals of the attacks of hæmaturia when there was no blood present in the urine.

Blood.—White count, 6200; red, 2,700,000; hæmoglobin, 25 per cent. During the ensuing interval of four weeks or so before the writer saw the patient in consultation with Dr. Sears and her transfer to the surgical side of the hospital, there was three further attacks of hæmaturia, one of which was of considerable severity, and the patient continued to slowly lose ground.

Operation.—Ether anæsthesia, May 27, 1903. The tumor was exposed by a five-inch incision made through the right linea semilunaris, and was seen to have its seat in the kidney. The growth was laid bare by incising the overlying peritoneum, and the field of operation was excluded from the general peritoneal cavity by suturing the edges of this incision to the outer wound in order that the removal of the kidney should be conducted extra-peritoneally. It was found necessary later to prolong the first incision, which was done by a transverse cut extending from the upper end of the former to the edge of the quadratus lumborum. The kidney and tumor formed a mass about one-third larger than shown in the accompanying illustrations. (Figs. 1 and 2.) There were numerous but not dense adhesions between the renal capsule and the perinephritic tissues. The capsule was moderately thickened. The ureter and the vessels were ligated separately, divided, and the kidney removed. The ureter was ligated low down below the iliac vessels because of the suspicion that the growth involved it. The temporary sutures attaching the margins of the peritoneal incision were removed, and the latter was closed above the space made by the removal of the



FIG. 2 shows appearances of kidney and tumor on section through the long axis of the organ and its pelvis.

kidney, and the outer wound closed except for a small part which was left open posteriorly for drainage.

Subsequent Course.—The patient bore the operation well. The subsequent course of convalescence was uninterrupted, except by the formation of a small superficial abscess occurring seven days after operation, and by the persistence of a very small sinus, which occasionally opened during the ensuing four or five months.

Urine.—In the first twenty-four hours the quantity passed was thirteen ounces. It was cloudy and concentrated, and contained a slight amount of microscopic blood. From third day the daily quantities were about thirty-five ounces, and at the end of the sixth week there were no longer any abnormal elements in the urine. Urea averaged about 1.9 per cent. after the first ten days.

The patient gained rapidly in strength and in general condition, was out of bed in twenty-eight days, and was discharged well about a fortnight later. The dusky color of the skin gradually disappeared. She remained in perfectly good health for fourteen months after the operation, and then suddenly died without any preceding illness. The clinical diagnosis was cerebral embolism. Autopsy was unfortunately not permitted.

Pathological Report of the Specimen.—The mass retains the general outline of the kidney. The external surface is generally nodular, with many points of injection from adhesions. The nodules vary in size from three to six centimetres in diameter, and compose practically the whole upper half of the kidney. The capsule is thickened and firmly adherent over the nodular area. On section, the whole upper half of the organ is occupied by a new growth, except for a small bit of renal tissue at the tip. There is one-half calyx in the lower half from which pyramidal tissue radiates. This area presents small, yellowish, discrete nodules, a few millimetres in diameter scattered through it, and the cortex is poorly defined. The tumor mass, which occupies the whole upper half of the kidney, extends from just beneath the capsule into the pelvis of the kidney. It possesses a distinct capsule of its own. The tumor is generally yellowish in color, with areas of hæmorrhage scattered through it. There is an irregular trabeculation of a firm, lighter-colored tissue making many small compartments of yellowish or reddish-yellow tissue. Some of these areas have degenerated and are soft, but for the

most part the growth is firm and elastic. Histological diagnosis, hypernephroma.

In the Medical and Surgical Reports of the Boston City Hospital, 1903, there is an admirable article by Drs. Paul Thorndike and J. H. Cunningham upon the subject of hypernephroma, in which reference is made to this case as one of a series, and in which there are three figures, illustrating the typical histological appearances of this variety of new growth, which were taken from specimens cut from the tumor of this kidney, and which are here reproduced by the courtesy of the writers of the above mentioned article. (Figs. 3, 4, and 5.)

CASE II.—Fibro-Adenoma of Inner Wall of Ileum causing Intestinal Obstruction; Resection of Fourteen Inches of the Intestine, including the Tumor; End-to-End Suture; Uneventful Recovery, December 2, 1903. The patient, a woman aged forty-four years; previous history of good health until six weeks previous to being admitted to the surgical service of the Boston City Hospital. At that time she began to have attacks of colicky pains in the abdomen, increasing gradually in severity up to the present. Associated with these attacks of pain there were alternating constipation and diarrhœa. For the last few days there has been no movement of the bowels, and the abdominal pain has become worse. General health has not suffered importantly. The pain has not been localized in one part of the abdomen at any time. Intestinal peristalsis well marked, can be seen and felt during the attacks of pain. Examination of the heart, lungs, liver, spleen, stomach, uterus, and adnexa negative. The abdominal wall is rather relaxed and flabby. There is no evidence of acute peritoneal inflammation.

On the right side of the abdomen is a tumor about the size of an orange, but of oblong form. It is freely movable, and can be pushed readily from the position which it usually occupies—just below the border of the right lobe of the liver—to a point below the crest of the ilium and beyond the median line also. The tumor changes its place also spontaneously from time to time within the above-named radius.

Operation.—The abdomen was opened in the right linea semilunaris by a three-inch incision. The tumor was then seen to have its seat within the small intestine-ileum, a little below the jejunum.

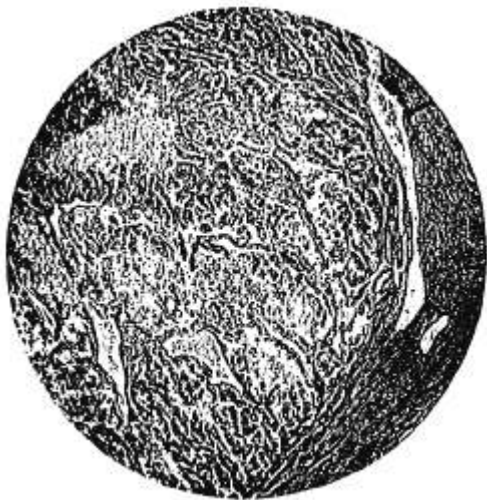


FIG. 3.—Case I. Stained with methylene blue and eosin. $\times 25$ diam. Note thin capsule with lymphoid cell infiltration below; wide vascular spaces; general tubular or adenomatous appearance; areas of degeneration above (pale staining).



FIG. 4.—Case 1. Stained with methylene blue and eosin. $\times$ 80 diam. Note vascular stalks; tubular appearance emphasized by lighter spaces (in part due to cell degeneration) lying outside well-nourished cells immediately facing capillaries.

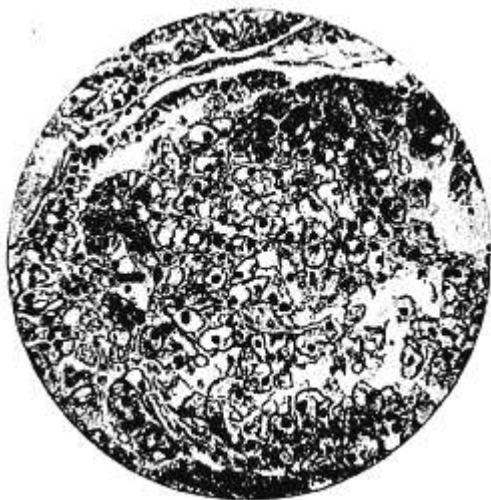


FIG. 5.—Case I. Stained with methylene blue and eosin. $\times 200$ diam. Note oval or polygonal shape of cells; preservation of their rim of cytoplasm; deeply staining nuclei sometimes lying upon cytoplasm threads; the perinuclear, lightly staining spaces, often filling the whole cell, and somewhat characteristic of hypernephroma.

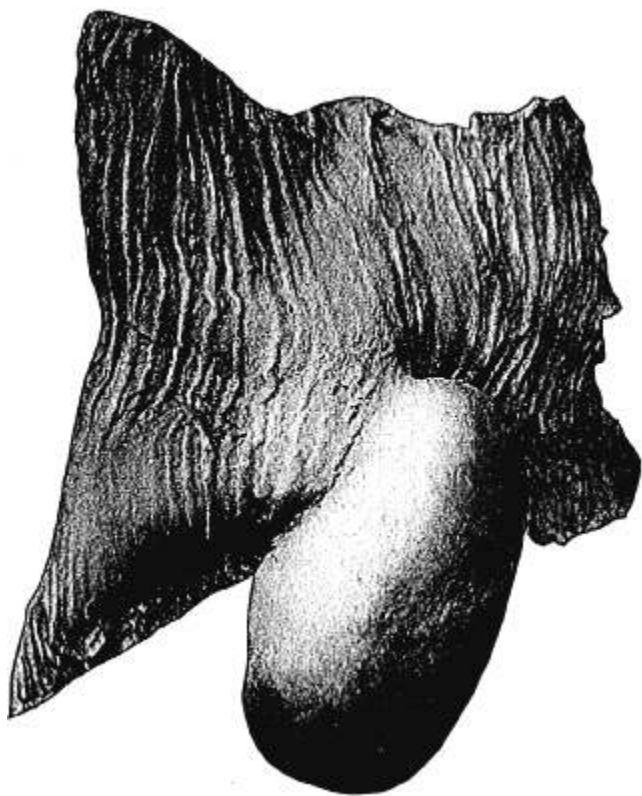


FIG. 6.—Case II. Benign fibroadenoma growing from the inner wall of the ileum. Actual reproduction will be four-fifths of actual size. Intestine is divided longitudinally, and its inner surface is shown with tumor growing from it.

The intestinal wall for twelve inches above the seat of the tumor was greatly thickened, in places inflamed; and the mesentery corresponding to this area was likewise thickened and its glands enlarged and indurated. The tumor was egg-shaped and of firm consistency, and was somewhat movable within the lumen of the intestine.

Fourteen inches of the intestine, including somewhat more than the thickened portion of it, and also the whole of the above noted part of the mesentery, were removed, together with the tumor. The severed ends of the bowel were brought together by an end-to-end suture with Cushing right-angle stitch. The abdominal wound was closed without drainage.

The patient made an uninterrupted recovery, and was discharged well and entirely relieved of her previous symptoms at the end of the third week after the operation.

The part of the bowel which had been removed on being laid open lengthwise showed a tumor of the size and form that appear in the accompanying illustration. (Fig. 6.)

Examination of the specimen showed the growth to be a benign fibro-adenoma. The enlargement of the mesentery and its glands was of inflammatory origin, and that of the intestine was due in part to hypertrophy of its muscular structure and in part to inflammatory changes. The distal end of the tumor had an ulcerated area upon it about the size of a one cent coin, otherwise the surface was smooth and had undergone no degenerative changes. The growth sprang from the inner surface of the intestine, to which it was connected by a pedicle about one-quarter of an inch in diameter. Its surface was smooth and in texture the growth was firm and fleshy. The color of the surface was that of normal mucous membrane except at the point occupied by the ulcer above noted. The patient was seen eight months later and was well.*

* Unfortunately, the specimen was mislaid before a thorough histological examination could be made of it; hence the meagreness of the report in this respect. Apart from that feature of the case, its interest lay in the difficulties in making an exact diagnosis before the operation, in the large size of the growth, and its relative rarity. It measured in its long diameter three and one-fourth inches, and in its transverse one just a fraction less than two inches.